

[illegible]



KENTUCKY TRANSPORTATION CABINET  
Department of Highways  
DIVISION OF HIGHWAY DESIGN

TC 61-505  
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**STORM SEWER DESIGN COMPUTABLE TABLE**

**INSTRUCTIONS**

| COL # | ITEM                  | DESCRIPTION  |
|-------|-----------------------|--|
| 1.    | End of Pipe ID        | Inlet, manhole or junction number of symbol  |
| 2.    | Station               | Roadway station or end of pipe location  |
| 3.    | Drainage area, A      | Contributing drainage area at inlet or manhole   |
| 4.    | Runoff coefficient, C | Representative runoff coefficient of drainage area   |
| 5.    | CA                    | Intermediate runoff calculation  |
| 6.    | $\Sigma$ CA           | Summation of CAs to this point   |
| 7.    | Pipe travel time, T   | Pipe length (col. 11)/Mean Velocity (col. 14)  |
| 8.    | Total travel time     | Travel time to inlet (col. 8) + pipe travel time (col. 7)  |
| 9.    | Rainfall intensity, I | Compute based on total travel time (col. 8)  |
| 10.   | Flow, Q               | Rational discharge = CA (col. 6) x I (col. 9)  |
| 11.   | Pipe Length, L        | Place pipe entries between inlets, manholes, or junctions  |
| 12.   | Pipe Slope, So        | Slope of pipe in ft/ft   |
| 13.   | Pipe diameter, D      | Determine from nomograph or other means (n=0.012)  |
| 14.   | Mean pipe velocity, V | Determine from nomograph or other means  |
| 15.   | Full pipe flow        | Determine from nomograph or other means  |
| 16.   | Capacity (%)          | Design capacity = Flow (col. 10)/Full pipe flow (col. 15); If design flow produces pressure flow, resize pipe. |